


INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 14506-43841	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/26802	International filing date (day/month/year) 27 August 2003 (27.08.2003)	Priority date (day/month/year) 27 August 2003 (27.08.2003)
International Patent Classification (IPC) or national classification and IPC IPC(7): C12M 1/34; G01N 16/06; B01L 3/00 and US Cl.: 436/288.5, 297.2, 297.3; 422/68.1, 102; 210/198.2, 198.3, 656, 658		
Applicant VANDERBILT UNIVERSITY		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u> </u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 29 March 2004 (29.03.2004)	Date of completion of this report 28 September 2004 (28.09.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Robert Warden  Telephone No. 571-272-1700	

I. Basis of the report

1. With regard to the elements of the international application:*

☒ the international application as originally filed.☒ the description:

pages 1-31 _____ as originally filed

pages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.☒ the claims:

pages 32-42 _____, as originally filed

pages NONE _____, as amended (together with any statement) under Article 19pages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.☒ the drawings:

pages 1-5 _____, as originally filed

pages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.☐ the sequence listing part of the description:pages NONE _____, as originally filedpages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in printed form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☒ The amendments have resulted in the cancellation of:☒ the description, pages None☒ the claims, Nos. None☒ the drawings, sheets/fig None5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-77</u>	NO
Inventive Step (IS)	Claims <u>None</u>	YES
	Claims <u>1-77</u>	NO
Industrial Applicability (IA)	Claims <u>1-77</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-77 lack novelty under PCT Article 33(2) as being anticipated by USP 5,955,029 (Wilding et al.) See description of figure 3a, 7, 13.

Claims 1-77 lack novelty under PCT Article 33(2) as being anticipated by US 6,168,948 B1 (Anderson et al.). See description of figures 5a, 6a, 11d, 17a, 17b.

RESPONSE TO APPLICANTS ARGUMENTS FILED 08 September 2004

Regarding the US patent 5,955,029 (Wilding et al.), applicant argues that the devices shown in figures 3a, 7, and 13, include elements which are not claimed, i.e. heating and cooling element 57. However, the US patent does disclose those structural elements claimed and the claims do not preclude the additional structural features included in the Wilding et al patent.

Regarding the US patent to Anderson, applicant argues that Anderson does not include many features of the invention. However, the claims are not comensurate with applicants arguments.

NEW CITATIONS

US 5,955,029 A (Wilding et al.) 21 September 1999, see description of figure 3a, 7, and 13.

US 6,168,948 B1 (Anderson et al.) 02 January 2001, see description of figure 5a, 6a, 11d, 17a, 17b.